

## MANAGEMENT SUMMARY December 31, 2022 GASB 74 Actuarial Valuation

August 16, 2022



This report was prepared for St. Clair County, MI to summarize projected results based on information provided as of December 31, 2021 and may not be appropriate for other uses. Please contact Nyhart prior to disclosing this report to any other party or relying on its content for any purpose other than the intended use.

Except where indicated otherwise, the funding results included in this report are based on the same substantive plan provisions, and actuarial methods and assumptions as the FYE December 31, 2021 GASB 74/75 valuation (as of December 31, 2020). Census data was updated as of December 31, 2021.

The report shows cost projections under different economic scenarios. Actual results will vary from projections shown in this report, perhaps significantly, due to changes in the assumptions, plan provisions, participant demographics, interest rate movement, actual asset performance, and other actual experience of the plan. Depending on the use of this information, additional cost projections may be necessary to quantify the sensitivity of results. While a diligent effort has been made to produce reasonable projections, by their very nature projections are speculative. Plan sponsors are cautioned against placing too much reliance on any particular scenario. Nyhart cannot, and does not, guarantee or warrant any result presented in this exhibit. The Plan Sponsor should carefully review all information presented herein and notify Nyhart immediately if any information differs from that which the Plan Sponsor possesses.

This report has been prepared in accordance with generally accepted actuarial principles and practice. The undersigned are compliant with the continuing education requirements of the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States.

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## **Positive Claims Experience**

 Favorable health plan experience since last valuation is reflected for pre-Medicare benefits effective on January 1, 2022. Post-Medicare premiums reduced effective January 1, 2023.

## **Trust Lifespan**

 Health Care Trust assets still expected to last greater than 30 years, with a slightly longer/improved outlook compared to last year. Improved outlook is a function of investment income being higher than expected in 2021 and benefit payments/administrative expenses coming in lower than expected.

# **OPEB** Liability Reconciliation

CY 2021	
Total OPEB Liability (TOL) as of 12/31/2020 (5.25% discount rate)	\$ 74,439,126
Normal cost for CY 2021	1,170,172
Interest adjustment for CY 2021	3,877,597
Benefit payments for CY 2021	(3,545,989)
Expected TOL as of 12/31/2021	\$ 75,940,906
Differences between expected and actual experience	(12,701,094)
TOL as of 12/31/2021 before assumption changes	\$ 63,239,812
Changes in assumptions	1,824,378
Final TOL as of 12/31/2021 with assumption changes (5.25% discount rate)	\$ 65,064,190

• Differences between expected and actual experience include any deviation on demographic experience (turnover, retirement, death) and health care costs (premium rates and actual pay-go).

#### ACTUARY'S COMMENTS

- The proposed assumption changes made in this year's valuations are:
  - Reset health care cost increases for pre-65 retirees to an initial rate of 7.5% decreasing by 0.5% annually to an ultimate rate of 4.5% and change health care cost increases for post-65 retirees to an initial rate of 6.5% decreasing by 0.5% annually to an ultimate rate of 4.5%. This change caused an increase in liabilities.
  - Updated mortality scale from MP-2020 to MP-2021, which caused a slight increase in liabilities.

## Premium Rates Summary

Medical / Rx	Eff. 1/1/2021	Expected 1/1/2022**	Eff. 1/1/2022 (County Adopted Budget Rates)	Eff. 1/1/2022 (Premium Equivalent Rates)					
Non-Hardship* Pre	-Medicare Retire	e Rates							
Single	\$548.39	\$592.26	\$559.21	\$559.21					
2-Person	\$1,314.84	\$1,420.03	\$1,342.12	\$1,342.12					
Non-Hardship* Medicare Retiree Rates									
Single	\$105.61	\$105.61	\$105.61	\$105.61					
2-Person	\$211.22	\$211.22	\$211.22	\$211.22					

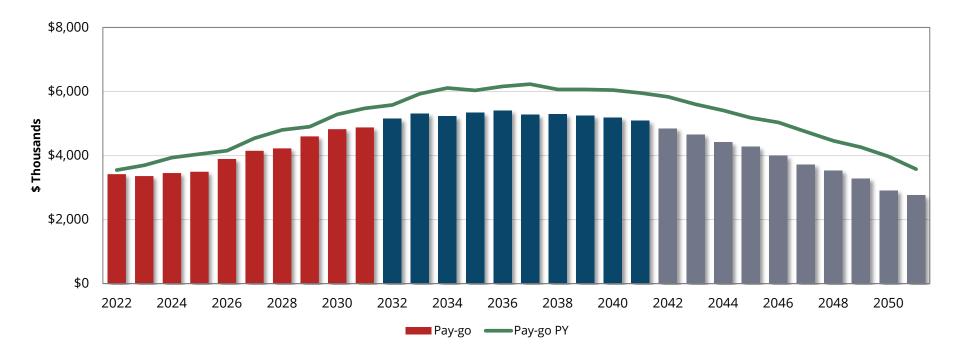
\* The County has separate Hardship plans that have the same medical provisions as Non-Hardship plans but with better prescription drug benefits. Effective 1/1/2013, Hardship Retirees are defined as any participants with annual household income of \$24,999 or less and have at least 20 years of service at retirement. Annual household income means any and all income (taxable or not) received by a retired member and/or their spouse residing in the same household.

\*\* Expected 1/1/2022 premium rates for pre-Medicare retirees are assumed to be 8.0% higher than 2021 and 0.00% higher for Medicare retirees.

The above rates are applicable to all locations (County, Mental Health, and Road Commission).

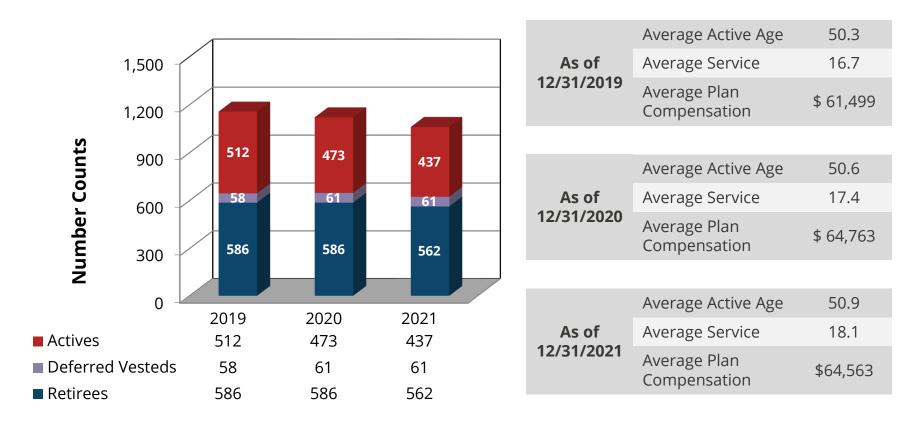
Premium equivalent rates determined by the County's healthcare consultants are used for determining the per capita cost assumption.





*In thousands* 2042 2022 2027 2032 2037 2047 2052 Current year \$3,419 \$4,148 \$5,149 \$5,271 \$4,841 \$3,720 \$2,693 \$3,546 \$6,227 \$5,836 \$3,405 Prior year \$4,539 \$5,581 \$4,745

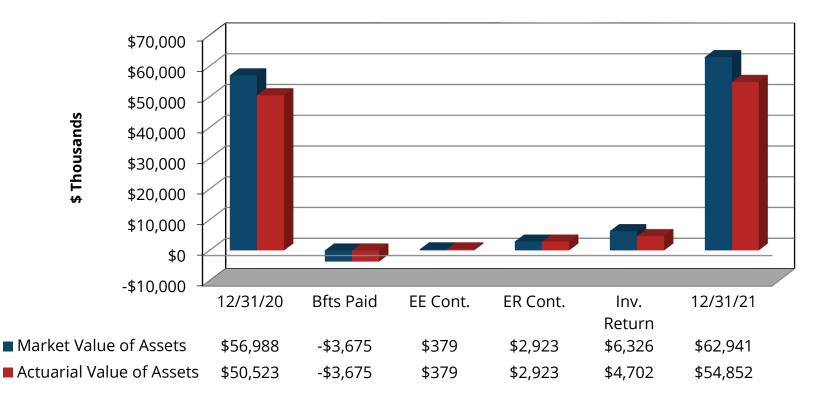
# Participant Information



ACTUARY'S COMMENTS

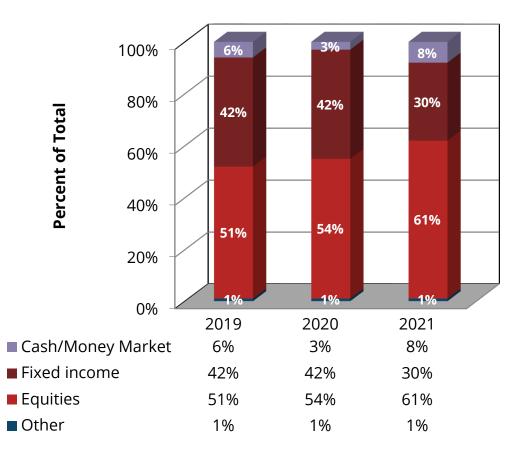
- Since the plan is closed, the total number of participants (actives, deferred vested, and retirees) is expected to decline very gradually in the future.
- Proportion of retirees as a % of total participants will continue to increase for several years in the future as the number of employees retiring are expected to be more than the number of retirees who passed away. There were 17 total retirements and 10 vested terminations in 2021.





• Actuarial Value of Asset is used to determine the funding requirement of the plan where asset gains and losses are being realized gradually over five years. While this "smoothing" approach will not reduce long-term costs, it will change the timing at which the costs are accounted for. The theoretical rationale for this approach is that gains and losses will offset one another before they must be paid.





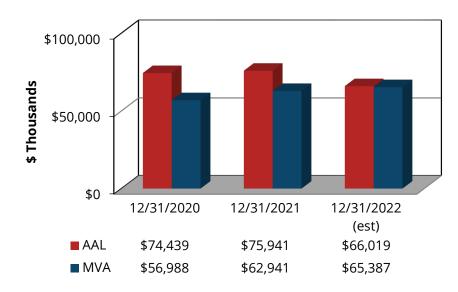
#### ACTUARY'S COMMENTS

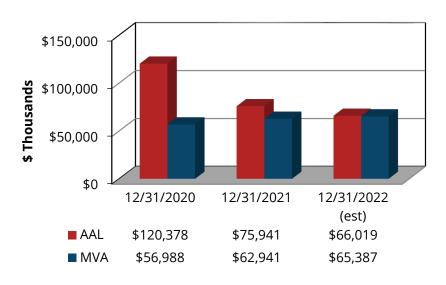
- The target plan asset mix should be considered when setting the expected investment return assumption used in determining the contribution requirements.
- The current target for plan assets as of 12/31/2021 is slightly more equity-based relative to 12/31/2020.



### FUNDING

### ACCOUNTING





#### ACTUARY'S COMMENTS

 Under GASB 75, a blended discount rate must be used if the HCT is projected to be depleted at some point in the future. This approach uses MVA. Last year, HCT assets were not projected to grow to \$63M until 2025. The increase in Trust assets using MVA allows for use of the investment rate of return for discount rate purposes. However, 2022 performance will be considered as well as the municipal bond rate at 12/31/2022.

1	12/31/2020	12/31/2021	12/31/2022 (projected)*
nded %	76.6%	82.9%	99.0%
funded AAL	\$17,451	\$13,000	\$632
scount Rate	5.25%	5.25%	5.25%
nded %	47.3%	82.9%	99.0%
funded AAL	\$63,390	\$13,000	\$632
scount Rate	3.90%	5.25%	5.25%
	nded % funded AAL scount Rate nded % funded AAL	funded AAL       \$17,451         scount Rate       5.25%         nded %       47.3%         funded AAL       \$63,390	nded % 76.6% 82.9% funded AAL \$17,451 \$13,000 scount Rate 5.25% 5.25% nded % 47.3% 82.9% funded AAL \$63,390 \$13,000

# Funded Status (By Group)

#### Funding Valuation (Discount rate = 5.25%)

Funded Status a 12/31/2021	Total County		Mental Health		Road Commission		
Actuarial Liability (AAL)	\$ 75,940,906	\$	50,961,974	\$	14,258,537	\$	10,720,395
Smoothed value of assets (AVA)	(54,851,604)		(27,947,137)		(21,114,584)		(5,789,883)
Unfunded AAL	\$ 21,089,302	\$	23,014,837	\$	(6,856,047)	\$	4,930,512
Funded Ratio	72.2%		54.8%		148.1%		54.0%

GASB 74 / 75 (Discount rate = 5.25%)									
Funded Status at 12/31/2021		Total		County	Μ	ental Health	C	Road ommission	
Total OPEB Liability (TOL)	\$	75,940,906	\$	50,961,974	\$	14,258,537	\$	10,720,395	
Plan fiduciary net position*		(62,941,369)		(32,095,915)		(24,313,837)		(6,531,617)	
Net OPEB Liability (NOL)	\$	12,999,537	\$	18,866,059	\$	(10,055,300)	\$	4,188,778	
Funded Ratio		82.9%		63.0%		170.5%		60.9%	

\* Based on market value of assets.

(in thousands)



Funded Status at End of Year	1/1/2021		1/1/2022		1/1/2023 <sup>1</sup>	
Actuarial Liability (AAL)	\$	74,439	\$	75,941	\$	66,019
Smoothed value of assets (AVA)		(50,523)		(54,852)		(58,494)
Unfunded AAL	\$	23,916	\$	21,089	\$	7,526
Funded Ratio		67.9%		72.2%		88.6%

As of 12/31/2020	Actives	473
	Retirees / Survivors	586
	Terminated Vested <sup>4</sup>	61
	Total	1,120

Fiscal Year ADC	2021		2022		<b>2023</b> <sup>1</sup>	
ADC <sup>2</sup>	\$	5,065	\$	5,221	\$	3,833
Covered payroll <sup>3</sup>	\$	30,633	\$	28,214	\$	28,849
ADC as % of payroll		16.5%		18.5%		13.3%
Projected benefit payments	\$	3,675	\$	3,699	\$	3,358

	Actives	437
As of 12/31/2021	Retirees / Survivors	562
	Terminated Vested <sup>4</sup>	61
	Total	1,060

## Funded Status shown above is based on a 5.25% discount rate, which is amortized and included as a component of the Actuarially Determined Contribution (ADC).

<sup>1</sup> Projected on a "no gain/loss" basis from 12/31/2021 valuation.

<sup>2</sup> Includes normal cost (reduced for estimated employee contributions) and amortization of unfunded AAL.

<sup>3</sup> FY 2023 covered payroll is projected from FY 2022 and takes into account anticipated terminations and retirements.

(in thousands)



Funded Status at End of Year	1/1/2021		1/1/2022		1/1/2023 <sup>1</sup>	
Actuarial Liability (AAL)	\$	49,861	\$	50,962	\$	44,308
Smoothed value of assets (AVA)		(25,919)		(27,947)		(28,885)
Unfunded AAL	\$	23,942	\$	23,015	\$	15,423
Funded Ratio		52.0%		54.8%		65.2%

As of 12/31/2020	Actives	290
	Retirees / Survivors	380
	Terminated Vested <sup>4</sup>	32
	Total	702

Fiscal Year ADC	2021	2022	-	2023 <sup>1</sup>
ADC <sup>2</sup>	\$ 3,891	\$ 4,128	\$	2,974
Covered payroll <sup>3</sup>	\$ 18,783	\$ 16,679	\$	17,055
ADC as % of payroll	20.7%	24.7%		17.4%
Projected benefit payments	\$ 1,978	\$ 2,370	\$	2,179

As of	Actives	261
	Retirees / Survivors	365
12/31/2021	Terminated Vested <sup>4</sup>	45
	Total	671

## Funded Status shown above is based on a 5.25% discount rate, which is amortized and included as a component of the Actuarially Determined Contribution (ADC).

<sup>1</sup> Projected on a "no gain/loss" basis from 12/31/2021 valuation.

<sup>2</sup> Includes normal cost (reduced for estimated employee contributions) and amortization of unfunded AAL.

<sup>3</sup> FY 2023 covered payroll is projected from FY 2022 and takes into account anticipated terminations and retirements.

(in thousands)



Funded Status at End of Year	1.	/1/2021	1/	1/2022	1/	1/2023 <sup>1</sup>
Actuarial Liability (AAL)	\$	13,832	\$	14,259	\$	12,428
Smoothed value of assets (AVA)		(20,006)		(21,115)		(22,578)
Unfunded AAL	\$	(6,174)	\$	(6,856)	\$	(10,149)
Funded Ratio		144.6%		148.1%		181.7%

As of 12/31/2020	Actives	140
	Retirees / Survivors	85
	Terminated Vested <sup>4</sup>	24
	Total	249

Fiscal Year ADC	:	2021	2022	2	023 <sup>1</sup>
ADC <sup>2</sup>	\$	275	\$ 275	\$	243
Covered payroll <sup>3</sup>	\$	8,916	\$ 8,905	\$	9,105
ADC as % of payroll		3.1%	3.1%		2.7%
Projected benefit payments	\$	1,024	\$ 637	\$	563

As of 12/31/2021	Actives	136
	Retirees / Survivors	81
	Terminated Vested <sup>4</sup>	32
	Total	249

## Funded Status shown above is based on a 5.25% discount rate, which is amortized and included as a component of the Actuarially Determined Contribution (ADC).

<sup>1</sup> Projected on a "no gain/loss" basis from 12/31/2021 valuation.

<sup>2</sup> Includes normal cost (reduced for estimated employee contributions) and amortization of unfunded AAL. If fully funded under the long-term expected discount rate, as shown above for the Mental Health group, an entity could contribute \$0. However, for long-term sustainability purposes, Nyhart would recommend contributing the normal cost plus interest for years in which that entity is fully funded (total for employer + employee contributions). The Mental Health's final recommended contribution reflects the normal cost plus any applicable positive interest, consistent with their assumed funding policy going forward.

<sup>3</sup> FY 2023 covered payroll is projected from FY 2022 and takes into account anticipated terminations and retirements.

(in thousands)



Funded Status at End of Year	1/	/1/2021	1/	1/2022	1/	1/2023 <sup>1</sup>
Actuarial Liability (AAL)	\$	10,746	\$	10,720	\$	9,283
Smoothed value of assets (AVA)		(4,598)		(5,789)		(7,031)
Unfunded AAL	\$	6,149	\$	4,930	\$	2,252
Funded Ratio		42.8%		54.0%		75.7%

	Actives	43
As of	Retirees / Survivors	121
12/31/2020	Terminated Vested <sup>4</sup>	5
	Total	169

Fiscal Year ADC	:	2021	2022	2	.023 <sup>1</sup>
ADC <sup>2</sup>	\$	899	\$ 817	\$	616
Covered payroll <sup>3</sup>	\$	2,934	\$ 2,630	\$	2,689
ADC as % of payroll		30.6%	31.1%		22.9%
Projected benefit payments	\$	673	\$ 692	\$	616

As of	Actives	40
	Retirees / Survivors	116
12/31/2021	Terminated Vested <sup>4</sup>	6
	Total	162

### Funded Status shown above is based on a 5.25% discount rate, which is amortized and included as a component of the Actuarially Determined Contribution (ADC).

<sup>1</sup> Projected on a "no gain/loss" basis from 12/31/2021 valuation.

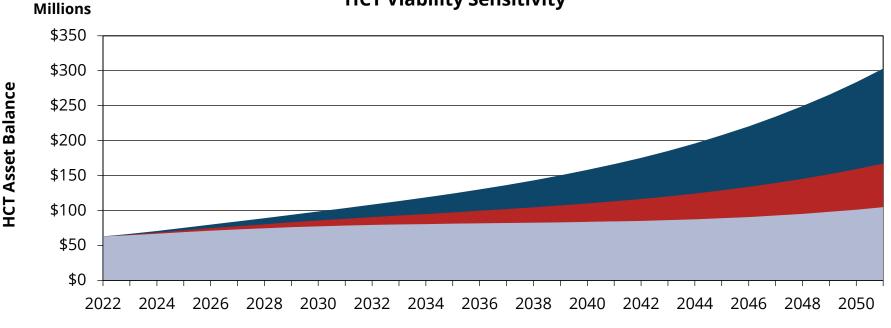
<sup>2</sup> Includes normal cost (reduced for estimated employee contributions) and amortization of unfunded AAL.

<sup>3</sup> FY 2023 covered payroll is projected from FY 2022 and takes into account anticipated terminations and retirements.

## HCT Projections



#### **HCT Viability Sensitivity**



■ 7.00% returns (>30 years) ■ 5.25% returns (>30 years) ■ 4.00% returns (>30 years)

• Viability of Health Care Trust (HCT) is sensitive to investment income earned and future Trust contributions. Below is a comparison of the viability of the Trust under three different return scenarios:

	Low Return	Expected Return	High Return
	(4.00%)	(5.25%)	(7.00%)
# of years until depletion	>30	>30	>30

## HCT Projections



### Assumptions used to determine the viability of HCT:

- Market Value of Asset as of 1/1/2022 of \$62.9 million.
- Active employee contribution of 2.5% for all County employees and 2.0% for Mental Health (hired after 11/7/2007). Contribution is limited to the first \$50,000 of salary for a majority of County employees.
- Future salary is projected from 12/31/2021 salary and takes into account future terminations and retirements.
- Flat dollar employer contributions as shown below, which are determined based on the average contribution in the past three years. This assumption has been updated since last year and the comparison of current and prior year assumptions are as shown below.

	County (including Sheriff)	Mental Health	Road Commission
Current	\$ 797,000	\$ 282,000	\$ 1,425,000
Prior	\$ 980,000	\$ 254,000	\$ 1,443,000

• Under the GASB 75 accounting standard, the depletion date of the Trust can affect the discount rate used for accounting disclosure purposes. However, due to the market value of assets as of 1/1/2022 and continued (assumed) contributions, the Trust is not expected to be depleted based on GASB 75 requirements for this calculation.

## HCT Projections



Viability of HCT varies greatly between locations. Based on the market value of assets by location, the viability of HCT using a 5.25% assumption is as shown below.

	County (including Sheriff)	Mental Health	Road Commission
MVA as of 1/1/2022 (in millions)	\$ 32.4	\$ 25.3	\$ 7.6
HCT depleted in	>30 years	>30 years	>30 years

# PA 202: Additional Reporting

The County will be required to report under the PA 202 uniform assumption requirements for Form No. 5572 similar to last year. These disclosures include the Actuarial Value of Assets (AVA), Actuarial Accrued Liability (AAL), and Actuarially Determined Contribution (ADC). The 2022 Uniform Assumption requirements are described briefly below:

Assumption	Uniform Assumption Guidance
Investment Rate of Return	Maximum of 6.85%
Discount Rate	<ul> <li>Blended discount rate calculated per GASB 74/75:</li> <li>Maximum of 6.85% where plan assets are sufficient to make projected benefit payments</li> <li>2.16% for periods where assets are insufficient to make projected benefit payments</li> </ul>
Salary Increase	Minimum of 3.00% or based on actuarial experience study within the past 5 years
Mortality Table	A version of PUB-2010 with Scale MP-2020 generational mortality improvement or based on actuarial experience study within the past 5 years
Amortization Period	Maximum closed period of 27 years for Retiree Health Systems
Asset Valuation	Market Value as reported on Financial Statements
Healthcare Inflation	Non-Medicare: 7.25% decreasing 0.25% per year to a 4.50% long-term rate Medicare: 5.50% decreasing 0.25% per year to 4.50% long-term rate



## Next Steps



Issue December 31, 2021 funding valuation report



Issue December 31, 2022 accounting valuation report (after FY 2022 assets are available)

# APPENDIX

Substantive Plan Provisions

#### ELIGIBILITY

Original Plan Members - earlier of:

- Age 55 (or age 50 for Sheriff) with 25 years of service (YOS)
- Age 60 with 8 YOS
- 25 YOS and 80 points

Modified Plan Members – earlier of:

- Age 55 (or age 50 for Sheriff) with 25 YOS
- Age 60 with 20 YOS
- 25 YOS and 80 points

#### **RETIREE CONTRIBUTIONS**

Employees are eligible for retiree health benefits if they meet all of the following requirements:

- Original Plan Members have at least 8 YOS at retirement and contribute to Health Care Trust (HCT) while actively employed if it's required in their Collective Bargaining Agreement (CBA).
- Modified Plan Members have at least 20 YOS at retirement and contribute to HCT while actively employed if it's required in their CBA.
- All employees may purchase retiree health benefits if they have at least 11 YOS at retirement regardless of whether they contribute to HCT while actively employed.

#### STATUS OF THE PLAN

Plan is closed to new hires for all General County, Mental Health, and Road Commission.

#### TERMINATED VESTED EMPLOYEES

- Commencing at age 55 or age 60 if they have at least 25 YOS or fewer than 25 YOS at termination respectively.
- Contribution requirements follow regular retirees.

#### **SPOUSE BENEFIT**

Surviving spouse can continue coverage upon death of the retiree or active employees who have at least ten YOS at time of death. Surviving spouse contribution requirement follows member's contribution requirements prior to their death.

#### **DISABILITY RETIREMENT (Sheriffs Only)**

- No age / service requirement for duty disability, ten YOS for non-duty disability.
- Contribution requirements follow regular retirees.

# Actuarial Assumptions

Interest Rate	5.25% for funding valuation as of 12/31/2021 and 5.25% for accounting purposes as of 7/31/2022 <sup>1</sup>
Annual Pay Increases	2.25% plus merit scale based on the December 2019 Pension Experience Study
Mortality Rates	Various Pub-2010 Headcount-weight Mortality Tables using scale MP-2021
Actuarial Cost Method	Entry Age Normal Cost (as a % of pay)
Amortization Method	Level dollar for County and level % of pay for Mental Health and Road Commission Amortization period used in calculating FY 2022 ADC is 8 years
Asset Valuation Method	Actuarial value of assets with 5-year smoothing of asset gains and losses
Retirement and Withdrawal Rates	Varies by age, service, and employee type – based on December 2019 Pension Experience Study
Disability Rates	Varies by age – only valued for Sheriff group (25% of disability is assumed to be line of duty)
Medical/Rx Trend Rates	Pre-65: Initial rate of 7.5% decreasing to an ultimate rate of 4.5% in 6 years for all locations Post-65: Initial rate of 6.5% decreasing to an ultimate rate of 4.5% in 8 years for all locations
Dental Trend Rates	Constant 4.0%
Health Care Coverage Election Rate	<ul> <li>Active employees with coverage:</li> <li>90% for County General</li> <li>75% for Mental Health</li> <li>80% for Sheriff</li> <li>85% for Road Commission</li> <li>100% of terminated vested</li> <li>100% of retirees with current coverage</li> <li>All participants without current coverage are assumed never to elect coverage.</li> </ul>

<sup>1</sup> Will be updated as of 12/31/2022 when available